

Support System: A Concept Analysis

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ABSTRACT

Support system patterns of nurses were reviewed to identify patterns that will have a vast or less impact on the nursing services. It is sought to determine the different factors affecting the healthcare professionals' way of achieving the optimum healthcare delivery system, particularly with nurses working in a COVID-19 department towards patients and healthcare professionals. This study used the Walker & Avant (2019) concept analysis and integrative review method. Results revealed that nurses in COVID-19 facilities or other settings face different challenges. Depending on their way of managing these tasks, whether they will get stressed depends on their perspectives and goals entering the nursing field. Based on the overall analysis, a robust support system will promote positive work. Management of this support will help our nurses to regain self-esteem, boost their camaraderie with all other medical frontliners, and establish proper rapport with their patients, whether COVID-19 or non-COVID-19 related. Through appropriate support that can make a huge difference in society, a part of a healthy community is supported by nurses who are doing their jobs exceptionally and manifest in improving the healthcare delivery system.

Keywords: Support System, COVID-19, Walker and Avant, Nursing, Concept Analysis

INTRODUCTION

The pandemic moments played a lot of changes worldwide in one person and the others, from one country to another. It affected the whole process of education, politics, governance, and the healthcare delivery system worldwide since everyone is at risk of being afflicted with COVID-19. It involved the life and health of over a million people worldwide. This overburdens every country's healthcare delivery system, affecting healthcare providers like nurses.

COVID-19 poses significant challenges and pressures to healthcare workers worldwide as they are at the forefront of care [1]. Care with their commitment and professional obligations has caused physical and psychological stress to nurses, such as utilizing personal protective equipment, work-related issues, for instance, long shifts, etc. It's a new experience that leads to personal

satisfaction. But adverse family effects and rejection from others are the main stressors [1]. Therefore, it is essential to work on the support system health workers need. Particular attention should be paid to providing relevant training opportunities and support system, including appreciation, welfare nurse counseling services, and timely policies and strategies to protect healthcare workers in the event of a national disaster such as COVID19 as nurses have a central role and essential responsibility in addressing this global health problem.

With this concept analysis, the authors determined the different factors affecting the achievement of optimum level on healthcare delivery system with nurses working in a COVID-19 department towards their patients and working with all other medical frontliners and so proper determination of factors that may contribute to the success and failure of such job level.

Support system patterns of nurses were reviewed in this concept analysis to identify which of these patterns will have a vast or less impact on the nursing services affecting the ways our nurses portray their shifting jobs in the hospitals. Nurses from different fields and other researchers on this topic will fully understand how a proper support system for nurses will make a huge difference in decision making, rapport with significant others, ways of thinking, and actions towards a common goal, which is a success.

Background

The discussion will be based on the concept analysis of the support system on nurses during the COVID-19 pandemic, in which we know that the rapid spread of coronavirus disease globally affected many things – particularly the global economy, educational system, and public health at risk, and so on as we encounter these everyday scenarios involving all aspects of living and eventually affects the healthcare system. Nurses and all medical allied are at risk of contracting COVID-19 infection as they are perceived to play a vital role during a pandemic. With knowledge on how the dimensions of human factors will be able to help our nurses to do their best during this complex situation and preparation for possible pandemics soon through increasing knowledge expertise and upgrading skills for overall nurses’ performances[2],

however, human factors will also have disadvantages depending on how it is being portrayed to individuals especially when negative feedback was manifested. So conflicts may arise when not correctly managed.

Support system comes from different sources, whether from those who surround the patient or those healthcare workers with the nurses on how these involved persons continue to do their tasks to improve life and reach an optimum level of satisfaction for both parties. It is necessary to boost these support systems, especially within the workplace, to manifest teamwork and good results towards improving the healthcare system.[3] [4]

This concept analysis also means that a patient needs to support himself towards health recovery, with the willingness to pursue life and overcome these health challenges at a given time. It is a domino effect system that can be reflected in nurses' healthcare services towards our patients and vice versa. It depends on how someone will define a support system based on current and past experiences and from where it will originate and be cascaded, such as who will manage to give the support and who will be the beneficiaries. Using Walker & Avant’s (2019) [5] methodology where a guided concept was introduced with the usage of the following concept process to follow in which this concept analysis was derived (see Figure 1).

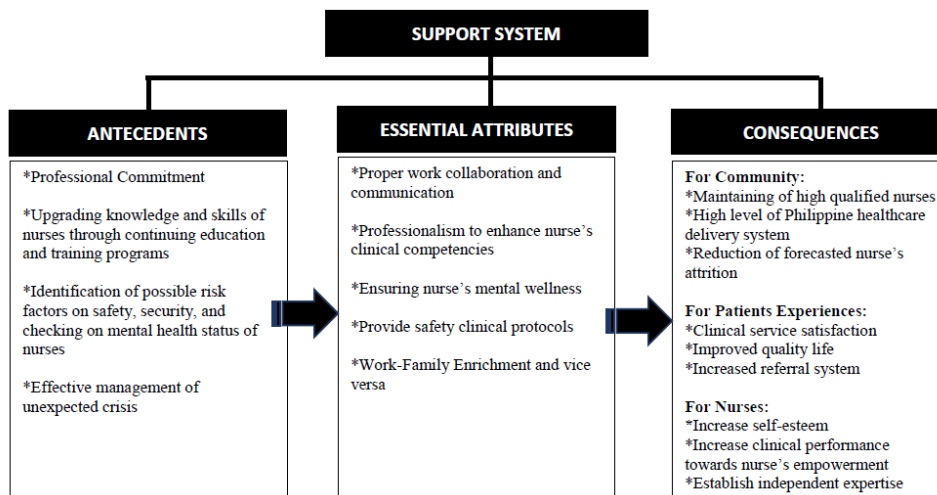


Figure 1. Conceptual Framework of Support System with the guidance of Walker and Avant (2019)

Definitions and Uses of Concept

According to Merriam-Webster Dictionary [6], a support system is defined as a network of people who provide an individual with practical support, physical support, psychological support, financial support, instrumental support, informational support, etc. It is a network of facilities and people who interact and maintain informal communication for mutual assistance that enables someone to live their lifestyle [7]. Sometimes, the support systems can be people willing to take risks to give those mentioned supports to boost happiness self-esteem, increase chances of positive coping mechanisms, and help build a network [8]. The support system may also provide tools such as using advanced technology to leverage the healthcare services for augmentation and enhancement of capabilities of healthcare workers [9] with the latest trends and innovations in the healthcare delivery system to achieve the optimum level of care for both the healthcare workers and patients with a goal of the highest level of satisfaction.

The support system may seem to have different branches aside from what was previously discussed, according to research conducted by [10], which included emotional support, instrumental support, and informational support that may also affect the individual on how support is given and received.

It is considered a chain effect when the hospital management, nurse managers, or higher post will be able to show value for their nurses – that action will also affect the way our nurses deal with patients. So a theory of interpersonal relations which was developed in 1952 by Hildegard Peplau highlighted the importance of nurse-patient build-up relationship to provide efficient, attentive, and broaden mindset on achieving good health for both parties (Nurse-Patient). It is also essential that during the caring phase with the patient, the nurse should also consider the development of broadened realistic healthcare practices that will be able to address the needs of unique cultural

demands of patients whether in the clinic setting, hospital setting, etc. [11] as part of executing an efficient care service to the support system. These support systems should be supportive; if it is not balanced, then it is time to set up new goals for a healthier boundary [8].

DATA SOURCE AND METHODOLOGY

Walker & Avant's (2019) model for concept analysis was used to dig in for further evaluation of related clinical studies for integrative review. Using the mentioned concept methodology, 8-point guidance for the concept analysis was introduced with the following concept process in which this review was derived. We have suitable concept selection, purpose determination, review of literature, decision and definition of analysis' attributes, identification, and choice of model, borderline, related, and contrary cases for review, identifying and choosing of additional case for review, clarification of antecedents and consequences, and empirical referents [5].

The data search engine was used to gather clinical research studies in correlation with the topic support system for reviews such as Google Scholar, PubMed, CINAHL, Semantics Scholar, dictionaries, and books. All these literature reviews are restricted to those translated into English from 2020-to 2021.

A total of 22 out of 301 were excluded due to exclusions and dupping to other research studies. However, 258 out of the remaining 279 research studies with full-text articles were excluded for the following reasons as follows: not related to the pandemic and has a different concept, not associated with nurses, other languages, press releases and those with incomplete information, nurses not currently handling COVID-19 patients at the time of research gathering thru search engines, focused on other medical fields other than nurses, different pathways, and lastly, those workshops and training not specific to nurses.

Level of Evidence ^[12] was categorized according to its level, which include Level I – Evidence from Systematic Review/ Meta-analysis relevant to randomized controlled trial (RCT) or evidenced-based clinical practice with either systematic RCTs and 3 or more RCTs, Level II – Evidence from at least one well designed RCT, Level III – Evidence from well-designed controlled trials such as quasi-experimental, Level IV – Evidence from well-designed case control and/or cohort studies, Level V – Evidence from systematic reviews of descriptive and qualitative studies such as meta-synthesis, Level VI – Evidence from single descriptive or qualitative study, and lastly, Level VII – Evidence from opinion.

Total of 21 research studies were used and measured using the evidence pyramid levels of evidence, to determine on which of these studies has the strongest strength of validity by referring to Table 1 (See Appendix) with the detailed information of the evidence compilation.

Concept Selection

The selection of concept for further analysis decided to focus on support system. Though it has a wide range of work determining the factors that affects support system of healthcare workers (HCW) in particular with COVID-19 nurses with their nature of work environment and how to handle different cases of their COVID-19 patients.

It is said that proper support system that includes family, friends, and all other significant others may be able to boost self-esteem and with all positive approaches that determine the effectiveness of ways to live life to the fullest. The satisfaction towards the clinical services for patient's satisfaction towards his/her faster recovery will be one of the main goals of an excellent nurse with strong support system. We need also not to forget that these possible resources of strengths and inspirations will also be part of the discouragement and source of negativity depending on the situation.

Discussion on different support system receive by nurses and how they perceive affecting their job satisfaction, job performances, colleague relationship, nurse-patient relationship and so on.

Purpose Determination

Increasing the knowledge, skills, and improve optimum level of healthcare delivery system from nurses down to their patients with proper acquaintances on the advantages and disadvantages of support system that can affect everyone's decision making as well as related consequences. The review of related literature will be of help to know the perceptions of these nurses affecting the way they think about the stability and sturdy of the Philippine healthcare delivery system.

6.1 Significance of Support System in Nursing

In an Iranian Journal conducted last 2013 ^[13] wherein in the study showed that nurses who are working with diligence, perseverance, high self-esteem, and job commitment in promoting optimum level of care for their patients often be promoted into a higher-level post based on their performance evaluation through the help of support system. Also, there are few key factors that demonstrate a different scene that worsen these support systems specially when barriers are present minimizing the known support and converted into a sub-category of unsuccessful provision ^[13]. Negative vibes that felt by nurses often sometimes redirected on how they managed to take care their patients. This is so true especially when exhausted nurses on duty often shouted by nurse managers or sometimes demotivated due to long hours of work or can be because of no support coming from the management. Some hospital managers often preferred not to investigate the competencies and excellent standard of care and competencies of an individual nurses but instead those with close family members or maybe within the

family clan can work in a hospital without hardships.

In earlier years the so-called support for nurses were not established well, you need to find other ways not to struggle in pain. Some nurses have chosen to work in a Business Process Outsourcing (BPO) industry as call center agents, insurance agents, etc. to build their careers in a non-clinical but medical-related opportunities as part of the big shifting on their ^[14]. Some maybe assigned in medical accounts, and some were not. It is the reality of truth for our nurses that they are not valued and no support system even from the highest organization of the nurses.

The overall Philippine healthcare system's situation nowadays affected our nurses in many ways, as follows: government's lack of provisions of giving decent nurses' wages monthly ^[15], nurse's safety in terms of handling patients both for COVID-19 and non-COVID-19 patients ^[16], and lastly, proper support system for nurses' clinical upgrading skills.

During these times - COVID-19 pandemic, most of the hospitals are giving a lot of incentives for their nurses to stay and apply for the open post. Doubled or tripled a regular payday check of nurses. Private duty nurses are on-demand especially for COVID-19 patients, whose in charge of the nursing interventions, and report back to their assigned charge nurses and doctors for any unusual findings from the assigned COVID-19 patient's condition. There will always be pros and cons when engaging yourself being a nurse, as follows: high pay on daily basis ^[17], additional knowledge and skills will be obtained from every shift, psychologically and emotionally ready, and being physically ready. ^[16]

Supporting each other as nurses will be one of the factors to uplift one's life and one's self-esteem. Having the rapport with your colleagues during working hours is superb because you feel so happy and not stress. However, not all licensed nurses will choose to work in a COVID-19 department for a reason of health issues and concerns

for their own families and for themselves as well. We cannot blame the fact that whenever they contracted the COVID-19 virus, no one will be able to help them except for themselves ^[16]. It will also be an advantage for all nurses to perform their tasks with proper endorsements and coordination with one another to address needs and possible complications, if there is any. Episodes of absenteeism or attrition at workplace really affected everyone in the chain of medical care, with the proper time management and team management in the department by nurse managers they can make a big difference on how these nurses will be supported in all aspects. Aspects such as emotionally, physically, and so on. Some healthcare allied professionals have chosen to work abroad however, with the recent Philippine government's deployment cap make it impossible for those who still needs to get their overseas employment certificates (EOC) prior to their deployment abroad, thus, this will cover the temporary suspension especially for nurses. ^[18]

6.2 Significance of Support System in Nursing Research

As observed from the previous months of the pandemic, most of the clinical trials were conducted in India and observing within the Philippine setting, it will be better if we will be able to support our colleagues who are doing research to better determine some effectivity of medical supplies and equipment especially for COVID-19 patients to have a better result. In addition, to make any alternative medications that are cheaper than the usual medications given to COVID-19 patients. Support system will contribute a better result for nurses to deal with their patients and all other medical allied professionals especially during the clinical course of treatment. Nowadays, treating COVID-19 patients are at risk and more things to consider before going inside the COVID-19 patient's room (e.g., wearing of complete PPE etc.), things to discuss with the COVID-19 patients etc. with proper teamwork everything will be put into a good

place, smooth endorsements, and happy environment for all staffs [17] [16]. The concept of support system will further give a chance to all in initiating the paperwork to include the real situations here in the Philippines done by clinical researchers to determine possible research works that will benefit the healthcare system here by collating information through online survey using google forms and all other platforms for research studies.

Antecedents

Antecedents are situations that needs to occur prior to the occurrence of the said concept [5], for this analysis which focuses mainly on the support system that nurses dealing with COVID-19 patients get from their families, significant others, management etc.

Several antecedents were identified that may define the concept of support system. It includes the following

antecedents’ factors such as professional commitment, upgrading the nurse’s knowledge and skills through continuing education and training programs, identification of possible risk factors on safety, security, and mental health status and lastly, the effectivity of management to resolve unexpected crisis.

Defining Attributes

When formulating a concept analysis, it vital to know the attributes as it will show the criterion on the factors that contribute to the main concept. It will give a better definition of why and how it affects the result of the concept analysis as it gives a better picture of the concept [5].

Based on the analysis, the defining attributes of the support system was concluded into five groups with each sub-grouping categories to explain further the attributes factors as seen on Table 2.

Table 2. Defining Attributes.

Attributes	Sub-group Categories
1. Proper work collaboration and communication	*To establish teamwork.
	*Right staffing and working assignments to decrease incidence of stress and all other related negative instances that affects the nurse’s clinical performances.
	*To enhance organizational performance and commitment towards their clinical work.
	*To effectively use proper communication when coordinating with nurses.
2. Professionalism to enhance nurse’s clinical competencies	*Providing standardized training programs to upskills nurses that includes stress management, anger management, latest trends and innovations related to their scope of specialty.
	*Provide mentoring on a regular basis depending on nurse availability.
	*Evaluation of clinical performance and upgrading clinical post.
	*Establishing proper way of clinical interaction towards self and other colleagues.
3. Ensuring nurse’s mental wellness	*Checking on the mental health status of each nurse and its capacity to continue the optimum level of care for the patient.
	*Providing enough rest and day offs to establish strengths and cope up with energy
4. Provide safety clinical protocols	*Addressing factors contributing to nurse’s health risks and providing regular COVID-19 swab testing.
	*Providing safe and secured working environment.
	*Proper work delegations and ensuring enough nurse staffing.
5. Work-Family Enrichment and vice versa	*Providing needed medical equipment such as PPEs, masks, gloves and so on.
	*Prosocial motivation
	*Family support
	*Family boundary flexibility
	*Job support

Proper work collaboration and communication. It is needed to establish teamwork within the group to establish rapport and gain trust. Maintaining enough nursing staffs during the shifting schedule to eliminate incidence of stress and other contributing factors that may affect the overall clinical performance towards patients.

Professionalism to enhance nurse’s clinical competencies. To upskill and motivate nurses to work diligently it is good to provide standardized training programs such as stress management, anger management, latest trends and innovations related to their scope of specialty. This will give nurses the chances of reflecting on themselves with their capabilities and

capacities as well as boosting their self-esteem. With regular mentoring which will eventually focus on identifying the strengths and weaknesses to be able to learn ways on how to gain more energy and able to self-evaluate which areas of improvement that needs to focus on for upskilling. This will also give chances on nurses to upgrade their position and to establish high level of clinical interaction with colleagues with confidence in explaining certain ideas.

Ensuring nurse's mental wellness. This can be done by addressing the need to check on nurse's mental health wellness before, during, and after work schedule [16][19][20]. One way also of ensuring mental wellness is providing of enough rest to establish more energy and decrease the stress level every after shift.

Provide safety clinical protocols. By addressing proper clinical protocols that may affect nurse's safety and security will be a priority especially by providing COVID-19 swab testing on regular basis as well as complete PPEs to establish the trust and decrease anxiety for nurses on the possibility of acquiring COVID-19 virus and that they may or may not affect their families [19] [16]. With enough nurse staffing that could limit the exposure and decrease the stress. Abiding with the clinical protocols per hospital will decrease the morbidity and mortality rates of COVID-19 infection towards medical allied professionals.

Work-Family Enrichment and vice versa. The last part of the attributes will be the enrichment towards work and family as a motivation for the nurses to continue with their clinical work. Proper social motivation from co-nurses will sometimes ease the burden during shift, teamwork, and proper coordination for patient's health and to decrease nurse's stress. Also supporting some nurses with family problems by mentoring and giving advises. In addition to the support system, a well job support will also give the chance for nurses to continue with their job despite of all the hindrances they are facing such as the pandemic, family

issues, personal issues, and so on. This will give the nurses the balance effect on accommodating their concerns in advance to decrease chances of absenteeism and nurse attrition in a long run.

Consequences

Consequences are the accumulated incidents that may result into a positive or negative feedback [5].

The consequences defining in concept analysis for support system includes:

Community. Aspects that may affect the community in terms of maintaining fully qualified nurses to achieve optimum level of healthcare delivery system within the Philippines and may showcase the capabilities and intellectual capacities of Filipino nurses in comparison to clinical skills. Within the community, there will be reduction of forecasted nurse's attrition when all the attributing factors will be address accordingly.

Patient's Experience. With proper execution, achieving clinical service satisfaction by patients will be there and improving one's life to be better and improve health wellness. Through the patient's experiences our nurses and all other medical allied professionals will be able to gain referral system that eventually will be a gauge for their clinical performances and will boost their confidence too.

Nurses. The possibility of good outcomes may be able to achieve an increase on nurse's clinical performances towards their increase of self-confidence and empowerment that they will be able to establish independent boost on their clinical expertise. One of the consequences also will be the job satisfaction, when nurses are paid on time, given enough support emotionally, physically, spiritually, etc. they will be able to perform well and showcase job satisfaction.

10. Constructed Cases

For this concept, the authors included the model case scenario, contrary case review and some related case scenarios. A model case [5] will be the case wherein all concepts were used, contrary case [5] will be the opposition case, and lastly, related case [5] will have the similar concept analysis on support system but does not show all the aspects of the essential attributions.

10.1 Model Case

V.B. has been working as private duty nurse since April this year. Since he was assigned as the coordinator, he worked so hard and helped other PDNs and other staff nurses when they needed some help such as intravenous insertion, CPR, intubation, and all other clinical procedures. Being coordinator does not allow him to have an extra pay but just a position to fill in. He used to be energetic and attended to different cases by the other PDNs and monitored all two (2) floors for the COVID-19 department. In the past couple of months, V.B. tend to be more serious and does not seem to smile more often not unlike before. He earned a lot as compared to other nurses. Few weeks ago, there was a depletion rate of COVID-19 patients' admission in the hospital and so some PDNs will either needs to transfer to other hospital for duty or stay in the current hospital and wait for the line-up. This incident made V.B. to lose his ability to track on his emotions. Less admissions means less PDNs will be needed in the hospital for duty. He felt physically exhausted from 24-hour shift and sometimes no sleep at all for several days and worried of what will be his next move. These problems affected his relationship and the way he treated his wife and so most of the time they do not talk with each other. He manifested some attributes that affected his mental wellness and lack of work-family enrichment.

10.2. Contrary Case

R.A. is married to a nurse working in Saudi Arabia. He is working as a PDN for several months now and one reason why he joined the PDN group is to build their family house for his family. He had a regular job before that he earned around Php 60,000/monthly but because of the PDN duty, he resigned and focus on being a PDN. He seemed to be energetic and optimistic every day. He has sense of humor too and making himself happy and people that surrounds him to smile and laugh. Despite the 24-hour monitoring of his patient daily, he tends to keep himself happy. Few weeks ago, there was a depletion rate of COVID-19 patients' admission in the hospital and so some PDNs will either needs to transfer to other hospital for PDN duty or stay in the current hospital and wait for the line-up. The news does not bother him at all, though he knew that he already resigned from the regular job, he is looking forward for new ventures. He is optimistic on the situation that everything will be okay despite the chaos and problems arise within. Though there were a lot of triggering factors that may attributes to his support system but still R.A. stay so firm and always look into the brighter side of the situation. He believes that everything happens for a reason and hoping that everything will be okay soon. He is religious person and always believe in God for guidance. Although his job of choice being PDN is challenging, he is able to showcase his capabilities and do self-check on his mental health status.

10.3. Related Case

D.P. is a newly recruited PDN in the hospital and just started her shift few weeks ago. She tends to observe some irregularities in the hospital management and staff nurses' collaboration with PDNs. She was so kin in taking good care of her COVID-19 patient and monitoring for 24-hour shift per day resulted into physical exhaustion however, she still manages to keep herself intact and happy despite the sleep deprivation and all other factors

contributing to her stress. She may not be able to speak up with her feelings, but you will notice it to her facial expressions and voice. One instance that the medication hospital staff nurse knocked in the room and handed her with medications. Upon checking the medications, she noticed that it was not intended to her COVID-19 patient and so, she went directly to the nurse's station told the staff nurses that the medication was wrongly given to her and there was a possibility that the staff nurse unintentionally gave it to her. She managed to speak up with the nurse manager and asked for incident report. She showed her confidence in protecting her patient and able to speak up with the incident despite the challenge.

11. Empirical Referents

Empirical referents are classes or categories of actual phenomena that by their existence or presence demonstrate the occurrence of the concept itself^[5].

The empirical referents for our concept analysis focusing on the support system of nurses assigned in COVID-19 department focused on the following outcomes based on the observed attributes includes the nurses' mental status, safety, and security, and lastly, their job satisfaction.

Nurses' Mental Status. Taking into consideration the mental health status of our nurses especially those who are working in the COVID-19 department as they are much prone to increase stress exposure, aside from that they are expected to deliver their best. In this concept analysis, it is obviously needed that supporting the mental health wellness of our nurses will make them feel loved and valued. They will be motivated throughout their shifting schedule. First, it is necessary to determine factors that may contribute to stressors, anxiety and/or depression by our nurses and citing possible ways to get rid or at least promote a positive support system to nurses ensuring that everyone's mental health is intact^{[20][22][23][24][25][26]}. Second, prioritization on

emotional health related to salary wages^[27], knowing that not all nurses will have the same salary rate depending on the location, case of the patient, and all other additional money involvement. The salary wage may also affect on how these nurses will manage their daily expenses and needs of their respective families. Third, finding ways to boost their knowledge by reading books and watching YouTube videos to keep updated with the latest trends and innovations in relation to proper COVID-19 clinical management.

Nurses' Safety and Security. When we talk about safety for nurses during this pandemic time that include the following: (1) enough supply of PPEs, masks, and face shields to be able to adhere with COVID-19 protocols on proper donning and doffing of PPEs by our nurses^[19]; (2) physical distancing; (3) placing of Hepa filter within each isolation room; (4) enough nursing staffing every shift to avoid reliever post and extension of duty on daily basis resulting to physical exhaustion of nurses and (5) routine COVID-19 swab test keeping themselves free of COVID-19 virus despite of their 8-16 hours monitoring with their respective COVID-19 patients because in some datasets of clinical studies showed that mostly nurses contribute on the COVID-19 case numbers both for the morbidity and mortality^[34]. As COVID-19 gives anxiety to nurses in different levels and depending how our nurses able to cope up with the situation^[16].

Nurses' Job Satisfaction. When we love our work, we usually stay and keep ourselves to grow and learn more. Job satisfaction played a dominant role in showing optimistic attitude towards work and work colleagues as it gives the feeling of contentment and happiness within. Eventually when one nurse was able to have their job satisfaction, it follows how they can achieve optimum level of care satisfaction also for their patients whether COVID-19 or non-COVID-19 patients.^[19]

A part of nurses' satisfaction also includes the salary wage, to be honest. In the current pandemic situation, depending on the hospital facility, salary range of nurses depends on their performances and specialty. In addition, the appreciation of their patients (e.g., saying 'thank you' via text messages or personally will make big difference towards these nurses' attitudes towards their workloads and colleagues.

RESULTS AND DISCUSSION

From the research databases, a total of twenty-one (21) reviewed research studies were used and measured using the evidence pyramid levels of evidence (ALS, 2021). These research studies were conducted worldwide, namely: (n=6) China; (n=1) Dubai; (n=1) Ecuador; (n=2) Egypt; (n=1) Ethiopia; (n=1) India; (n=1) Indonesia; (n=1) Israel; (n=1) Mexico; (n=1) Nepal; (n=1) Philippines; (n=2) South Korea; (n=1) Spain; and (n=1) name of country not mentioned.

Following the ALS evidence pyramid levels the following reviewed research studies got corresponding scores as follows: 1 out of 21 studies categorized with Level 1 (Evidence from systematic review/ Meta-analysis relevant to randomized controlled trial), 19 out of 21 studies categorized with Level 3 (Evidence from well-designed controlled trials such as quasi-experimental), and lastly, 1 out of 21 studies categorized with Level 5 (Evidence from systematic reviews of descriptive and qualitative studies such as meta-synthesis).

This analysis showed concepts on perceptions of nurses working for COVID-19 patients in correlation with their current situation in the hospital set-up with all the support system patterns affecting their job decision-making, job performances, personal life and future endeavors are as follows: Challenges Faced by Nurses Working with COVID-19 Patients during Pandemic Crisis, Support Systems for Nurses to Ensure Continuity of Healthcare Delivery System, and Opportunities Arising

Through Proper Support System Amidst the Challenges during Pandemic.

12.1. Challenges Faced by Nurses Working with COVID-19 Patients during Pandemic Crisis.

About the challenges experienced by our nurses it is necessary to determine the three (3) sub-group types of challenges as follows: Personal Dilemmas, Professional Dilemmas, and Community/Global Dilemmas.

12.1.1 Personal Dilemmas

(1) Fear of acquiring the COVID-19 Virus.

Due to increasing rate of COVID-19 infection, some licensed nurses tend to stay at home and stay with their families. With the fear of inflicting the virus and might infect other members of the family will stress them out^[16]. They tend to choose to find a job that does not require them to go to the hospital for duty, some are working under BPO industry^[14] and work at home while taking care of their families, some are doing online businesses, some are working as language teachers online etc. We cannot blame nurses to step out of the clinical environment however, it gives a lot of burden to those working in hospital settings that triggered a lot of problems which were unfair and harmed our nurse's health at all costs. These health and employment conditions are significantly associated with poor physical and mental health^[17].

Some nurses are receiving negative feedback regarding the participation on COVID-19 frontline work due to exposure to psychological problems that may be trigger during the hospital shifting plus the fact that these healthcare workers especially nurses are at higher risk of contaminated with COVID-19 virus that may eventually make their families and significant others to be at risk for their health status.^{[17][35]}

(2) Limited Resources.

Limited resources include the basic needs of each nurse such as personal health and safe practice, financial support, team

support and collaboration. Along with the said resources it was also included those concerns with the food during duty, groceries provided by the hospital for the nurse's families and family support especially those who were inflicted with COVID-19 within their family members. [19]

(3) Loneliness.

Since working in COVID-19 department it is mandatory to isolate yourself every after duty and do antigen swab test as well. It is not new that some nurses might feel lonely at this time, a silent dominating factor that added up into our nurse's anxiety at some point in life [16] [17] [20]. Nurses who are on duty for their COVID-19 patients usually get inside the patient's room most of the time and will have quick breaks in between every mealtime.

(4) Increase chances of engaging to Vices.

Due to increase rate of possible stress in the clinical area, some nurses tend to drink alcoholic beverages or light a cigarette to divert their minds for some time from stress and anxiety as one way of exercising their coping mechanisms. [20]

(5) Decrease Family-to-Work Enrichment and vice versa.

Lack of time for family needs are real [36], especially nowadays isolation and swab tests are needed before you can meet up with your loved ones. It will cost much of pain not seeing your family in addition to that will be the added financial burden of paying for your own swab tests, it will be lucky when the hospital you are working will have their free swab tests readily to provide but that depends on the situation. Some nurses since their long exposure with their COVID-19 patients, their social interaction is at stake and sometimes others tend to drink alcoholic beverages as a way of diversion with their stress. [36]

Despite of the challenging tasks of our nurses, some of them intended to stay with their post despite of all the stress, risk

perceived and lack of emotional support and PPEs during their shifts, thus, only ask for supportive aspect on their job of choice for their needs and value on the ethical decision-making concerns. [2]

(6) Mental Health Dilemmas.

Nurses encountered a lot of scenarios of COVID-19 patients on different levels, based on their health conditions during the admission, on-going treatments and so on. Nurses are witnesses of all the struggles of COVID-19 patients on daily basis – from successful discharge planning and sad to say some COVID-19 patients did not make it. It is so important that every after shift of the nurses, to have a mandatory to have counselling to be able to assess level of mental health and able to decrease chances of mental breakdown in the work area. [17]

12.1.2 Professional Dilemmas

(1) High demand for Workload with unstable shifting schedule and assignments.

During the shifting schedule in COVID-19 wards, our COVID-19 nurses are facing different challenges during their missions that includes heavy workloads due to some nurses are infected with COVID-19 virus and so they need to take longer hours of duty shifts to cover the shift, thus, changing their working patterns it also visible since they need to be more flexible [20][17][37]. In the Philippine setting, both government and private hospitals are employing part time COVID-19 nurses to fill in the position however, due to short notice, our hospital nurses are there to fill in the post instead. Nowadays, nurses in COVID-19 wards have their shifting changed every 8-hour, 12-hour and some are 16 hour shift to shorten the exposure and managing the number of nurses that will take care of the COVID-19 patients.

(2) Lack of Personal Protective Equipment (PPE).

Some of the challenges of our COVID-19 nurses includes the limited supplies of PPEs that will protect themselves when dealing with their patients [19] [20]. Due to daily procurement in the hospitals, sometimes some of their supplies are delayed and need to be resourceful and creative enough to maintain the supplies before the new one comes. PPE should be changing every 8 hours, however, in Philippine setting COVID-19 nurses are wearing diapers so that they will limit going to the toilet that may increase the exposure of others to COVID-19 virus, some nurses are wearing their PPEs 12hr period to save money since every usage of PPEs will be charge to the COVID-19 patient's hospital billing account.

(3) Lack Sense of Direction and Teamwork.

According to one study conducted in South Korea by [42] stating that it was truly a greater social support when nurses' able to talk with their higher operational management however, based on the results it causes an increase incidence of burnout, increase level of stress, and impaired sleeping pattern [17][19]

Depending on how a person perceive each word and actions towards the goal attainment. Closeness with hospital management personnel does not guarantee a full support and sometimes they are the factors triggering the stress. It is better to help yourself and seek proper support system.

(4) Uncertainty about Job Assignments and Job Security.

Nurses such as private duty nurses who works in a COVID-19 department does not guarantee a regular post from one hospital, sometimes you will be assigning to different hospital and/or different areas to handle different COVID-19 patients. There will be times that you will handle mild to

moderate cases depending on the availability.

In general, nurses will have their assignments depending on the availability of some nurses in their respective stations [16]. Due to infection and reinfection with COVID-19, some staffs are not able to go to work due to some mild to severe symptoms that they are experiencing and would like to stay at home and isolate. This will eventually be passing the burden of workload to those who are present in their clinical duty.

12.1.3. Community/ Global Dilemmas

(1) Nurses Migrating to other Countries and/or shifting from being Nurse to other Fields of Specialty other than Nursing.

It is true that batches of nurses are graduating yearly and passing their nursing licensure examination, however, with the current situation – pandemic makes these newly graduates to think more of where they can benefit more. Do they really want to work in the hospital despite the current increasing rate of COVID-19 infection and re-infection within Metro Manila and all over the country? Philippine government is giving incentives for nurses that will help and be assign in COVID-19 facilities to help the community.

Nowadays, more nurses are migrating from Philippines to other countries to work as nurses and feel their worth. In other countries, Filipino nurses are recognized to be flexible, hard-working, and fast learners. They tend to work abroad to earn enough money for savings and to be able to help their families here in the Philippines. Some preferred to work part time nurses as private duty nurses while having a regular job too, to widen their source of income to support their families. Some are working as online seller while others preferred to take care their families instead of going to work etc.

DISCUSSION

13.1 Support Systems for Nurses to Ensure Continuity of Healthcare Delivery System.

Every person can receive different level of support system from different sources ^[26] whether from families, from colleagues, or from significant others that found to be an effective way to face stressful events.

These kind of support systems are needed by nurses during their shifting schedule in the COVID-19 department along with positive coping mechanism that may include a decrease on their anxiety level, increase self-worth, increase their perseverance, able to fulfill their tasks on time, and increase their job performance and commitment on the chosen job despite the challenges and fear of COVID-19 virus ^[26]. Psychological experiences such as fear of uncertainty, fear of infection or reinfection, loneliness, and sleep disorders gave an option to nurses to be resourceful and at the same trying to divert their minds to cope up easily and focus with work even with all these emotional breakdowns during shift. As a nurse you need to be strong and strategic while observing COVID-19 protocols. Considering complex understanding of nurses during these pandemic situations to still promote high quality level of nursing services to execute clinical course of treatment ^[20].

These experienced nurses handling COVID-19 patients may have different levels of psychological levels depending on the source of stress etc. however with the increasing cases of COVID-19 nowadays, even projected date of when will this pandemic will be resolve is still in question. It is important to have motivations to continue with the professional commitment with proper support system. It is also important to undergo adequate training programs and positive feedback working with a positive attitude towards work when caring with COVID-19 patients. It is needed to value personal and professional growth

and expand your perception on other possibilities.

13.2 Opportunities Arising Through Proper Support System Amidst the Challenges during Pandemic.

Personal. With all the challenges for being nurse in a COVID-19 department, we are also looking into the opportunities such as (1) able to finance the family needs and (2) able to help in the global response to COVID-19 pandemic.

Professional. With proper support system, it makes the nurses feel valued, as part of the clinical staffs for managing the COVID-19 patient for full recovery, and this is a new venture to explore especially when considering new career of nurse as part time or full time. Some nurses are taking this opportunity of pandemic to upgrade themselves through online schooling to Masterals Programme or PhD Programme. Some are attending language courses to learn new languages for future purposes such as working abroad.

Community/ Global Advantages. Nurses working from other fields will be able to consider working as nurses as an alternative option for them to take. In a case for those nurses who are waiting for their working permit abroad, while waiting for their documents they can go back to clinical environment ^[37], they can work as part time private duty nurses, swabbers, vaccinators etc to help ease the burden of the community on finding nurses to help COVID-19 facilities as private duty nurses, staff nurses, swabbers and/or as vaccinators.

Limitations

In this concept analysis review listed down the following limitations as follows: some studies/analysis may have been conducted from other countries with no various demographic, ethnicity, religion, and cultural backgrounds and included only those that can truly affect the nursing services of COVID-19 nurses towards their COVID-19 patients and vice versa.

Implications for Nursing Practice

Today's current situation globally in relation to the spread of COVID-19 viruses with different variants, may have given different reactions and level of anxieties for our nurses especially those who are handling COVID-19 patients [38]. Different strategies were used to get attention of our nurses to work in the hospital fields and facilitate to support the team to work in COVID-19 department. A lot of efforts put into place to show support [39] in all aspects needed by our nurses. Emotional intelligence (EI) and social support has a direct and an indirect facet when it comes to occupational stress. [40]

There were lots of consequences that may affect the nurse in different ways depending on the situation and area of concerns. It is importance to address concerns of nurses before it may decrease their interests on their job posts. Addressing areas such as additional pay for their shifting schedule wherein they opted to work instead of spending time with their families that in return will also be a source of additional income for the family. Knowing the strengths and weaknesses of every nurse will help the clinical management on how they will be able to monitor those nurses that needs further assistance on their areas or possible to assign expert nurses to help other new nurses based on the hospital protocols and the like. This will increase self-confidence and empowerment and they will be able to establish an independent boost on their clinical expertise. By achieving clinical service satisfaction by patient's life to be better and improve health wellness. Through the patient's experiences, our nurses and all other medical allied professionals will be able to gain a referral system that eventually will be a measure their clinical performances and will boost their confidence too. Eventually, these actions will have a reduction on cases of absenteeism and possible attrition. When nurses find their clinical environment as happy, and colleagues do not have toxic

personalities will have an optimistic impact on their performances and individual self-fulfillment.

CONCLUSION

This concept analysis aimed to further determine the support systems needed by the staff nurses in all aspects of nursing interventions and course of a treatment plan for patient's faster health improvement towards full recovery from illnesses during this pandemic times. It contains an organized analysis on how to strategize ways to achieve optimum levels of healthcare delivery system by augmenting the nursing management's decision making in the contribution of support to nurses whether staff nurses as well as an excellent government proposal for improving the healthcare services in the community for the benefit of all citizens.

Nursing Management. Clinical managers should know how to address work stress and identifying nurse's strongest predictors of anxiety, stressors, and possible depression episodes [20] [22] [24]. Through proper identification of the triggering factors, development of mental health solutions will promote support with the help of training programs or online webinars ensuring optimistic working attitude and boost mental health wellness [20][22][23][24][25]. Focused training programs for nurses and other HCWs benefit focusing on disaster management, stress management, ethical decision making and so on [28]. It is also important to recognize the efforts and time exerted by these nurses to take care the COVID-19 patients, with the total care package starting from the admission to discharge planning [26] [27].

It is also important to give attention to nurses with chronic diseases or with comorbidities and history of mental illnesses to protect their psychological well-being [29] and will not lead into possible complications of health conditions. One aspect too that can help our nurses to give their best will be through well-compensated professional duty with high pay salaries to

support them financially aside from the psychological [27]. Increase social support for our dear nurses ensuring that there are enough nurses in the workstation with properly compensated and supported in all aspects to enable job retention. [31][30][31]. Strict organizational protocols on COVID-19 implementation [20][27] providing complete PPEs to protect the nurses every shifting and regular swab testing will keep their minds from overthinking. Encourage self-regulation methods such as exercising, dancing, singing, or listening to music to divert their minds with the stressful environment and social engagements with significant others [20][32] and providing sports facilities. [33]

Role of Government. The role of government should include community awareness and provide training for nurses and other front liners on handling COVID-19 virus transmission to limit the spread [29]. Reviewing of protocols that may affect everyone's health risks when not implemented with care. Also, providing national programs for Occupational Health and Safety (OHS) to prevent and decrease rate of violence in at work areas and avoidance of any physical or biological hazards towards nurses and others [29]. Establishing Work-Family enrichment for front liners especially to those nurses handling COVID-19 patients for them to focus on their nurse's work and increase their enthusiasm in dealing with their patients during disaster nursing [26]. Proper deployment of enough nurses and other HCWs especially to rural areas that needs further support during this pandemic. [33]

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APPENDIX

Table 1. Detailed Information of the Level of Evidence Compilation.

Country	Author/s	Purpose	Methods and Design	Findings	Strengths/ Limitations	Level of Evidence
Dubai	Al Thobaity, A., & Alshammari, F.F. (2020).	Addressing issues that nurses face that will help support them and develop protocols and plans to improve their preparedness for future purposes.	Integrative review will explore the issues facing nurses during their response to the COVID-19 crisis.	Major Issues: (1) Shortage of nurses (2) Hospital beds (3) Medical supplies(personal protective equipment) (4) Psychological changes (5) Fears of infection The implications of these findings might help to provide support and identify the needs of nurses in all affected countries to ensure that they can work and respond to this crisis with more confidence. Moreover, this will help enhance preparedness for pandemics and consider issues when drawing up crisis plans.	To be able to support nurses, it is advisable to have more research must be conducted in the field of pandemics for preparedness.	1
China	Mo, Y. et al. (2020).	To study the work stress encountered by Chinese nurses who supported the Wuhan outbreak and explore relevant facts and influencing factors.	Cross-sectional survey. N=180 (Nurses from Guangxi) Online questionnaire was completed. Chinese version of the Stress Overload Scale (SOS) and the Self-rating Anxiety Scale (SAS).	Three things that contributes to nurse's stress: (1) children; (2) long shifting duties per week; and (3) anxiety.	Nursing Management should focus on factors affecting work such as stress find solutions to increase mental health wellness of nurses.	3
China	Huang, H. et al. (2020).	To evaluate the nurses on their knowledge and stress level in relation to COVID-19, in addition, providing evidence to improve training programs and maintain mental health.	Cross-sectional survey. N=979 (Nurses) A self-designed questionnaire and Triage Assessment Form (TAF) were used. SPSS 23.0 was applied for statistical analysis of the collected data.	The results showed that the nursing staff provided the fewest correct answers to questions and there were statistically significant differences in scores between different nursing roles, years of work experience, and hospital departments.	This study indicated that nursing staff have insufficient knowledge about COVID-19. Meanwhile, although the psychological damage to nurses during the pandemic was found to be low, nurse managers must continue to monitor the mental health of nursing staff and perform timely interventions.	3
China	Zhang, Y. et al. (2021).	To examine the relationship between work-family enrichment and two contextual factors (job support and family support), together with two personal factors (family boundary flexibility and prosocial motivation) among Chinese nurses assisting Wuhan in its fight against the Coronavirus Disease 2019 (COVID-19) pandemic.	Cross-sectional research design was adopted with a snowball sample. N= 258 Chinese nurses Data were collected from 3/21/2020 - 04/10/2020 - battery of online questionnaires. Descriptive, univariate, and hierarchical linear regression analyses and a Pearson correlation test were performed. A STROBE checklist was used to report findings.	The results showed that prosocial motivation, family support and job support predicted high work-to-family enrichment in those nurses, while prosocial motivation, family support, and family boundary flexibility predicted high family-to-work enrichment.	Focus on work-family enrichment of front-line medical workers to maintain their enthusiasm for disaster nursing.	3

<i>Table 1 Continued...</i>						
China	Cai, H. et al. (2020).	This study aimed to investigate the psychological impact and coping strategies of frontline medical staff in Hunan province, adjacent to Hubei province, during the COVID-19 outbreak between January and March 2020.	Cross-sectional observational study. The study questionnaire included five sections and 67 questions (scores, 0–3). The chi-squared χ^2 test was used to compare the responses between professional groups, age-groups, and gender. N= 534	Perceptions of Nurses towards their Job: (1) Professional obligation to continue working long hours. (2) Medical staff were anxious regarding their safety and the safety of their families Things that boost nurses mental health: (1) Strict infection control guidelines (2) Specialized equipment (3) Recognition of nurses efforts	Continued acknowledgment of the medical staff by hospital management and the government, provision of infection control guidelines, specialized equipment and facilities for the management of COVID-19 infection should be recognized as factors that may encourage medical staff to work during future epidemics.	3
China	Que, J. et al. (2020).	To investigate the prevalence of psychological problems in different healthcare workers during the COVID-19 pandemic in China and explore factors that are associated with the onset of psychological problems in this population during this public health crisis.	A cross-sectional, web-based survey was conducted in February 2020. Psychological problems were assessed using the Generalized Anxiety Disorder Scale, Patient Health Questionnaire and Insomnia Severity Index. Logistic regression analyses were used to explore the factors that were associated with psychological problems.	The prevalence of symptoms of anxiety 46.04%, depression 44.37%, insomnia 28.75% and the overall 56.59% psychological problems respectively. The prevalence of the overall psychological problems in nurses 62.02% as compared with healthcare workers who did not participate in front-line work, front-line healthcare workers had a higher risk of anxiety, insomnia and overall psychological problems. In addition, attention to negative or neutral information about the pandemic, receiving negative feedback from families and friends who joined front-line work, and unwillingness to join front-line work if given a free choice were three major factors for these psychological problems.	Risk factors for psychological problems. (1) Receiving negative information (2) Participating in front-line work	3
Ecuador	Franco, J.A., & Leví, P.D. (2020).	To explore the feelings, stress factors, and adaptation strategies of nurses during the COVID-19 pandemic in Guayaquil, Ecuador.	A cross-sectional, descriptive quantitative study, conducted through the application of a 52-item questionnaire with four sections (feelings, perceived stress, stress-reducing factors, and adaptation strategies). N= 227 nurses from "Hospital General del Guasmo Sur" from March to May 2020. The sample comprised 155 nurses who voluntarily accepted to participate however, received 127 complete questionnaires for analysis.	The data showed the priority of humanist feelings and professional duty for these nurses, mostly young (59% under 35 years of age and with the professional exercise of three and fewer years), against the fear of contagion and the stress of strenuous work.	Things important for nurses: (1) Compensation (2) Hospital management support (3) Recognition (4) Strict organizational safe care through training programs	3

<i>Table 1 Continued...</i>						
Egypt	Baraka, A.A. et al. (2021).	To identify the predictors of critical care nurses' stress, anxiety, and depression in response to the COVID-19 pandemic.	A cross-sectional survey was conducted in five intensive care units in five hospitals in Alexandria, Egypt. N= 200 nurses completed the electronic questionnaire.	<p>Significant predictors of stress</p> <ol style="list-style-type: none"> (1) Number of infected colleagues (2) Availability of hospital resources <p>Significant predictors of anxiety</p> <ol style="list-style-type: none"> (1) Age (2) Gender (3) Satisfactory income (4) Years of experience (5) Time spent caring for covid patients (6) Continuous training (7) Number of infected colleagues (8) Availability of hospital resources <p>Significant predictors of depression</p> <ol style="list-style-type: none"> (1) Gender (2) History of physical problems (3) Educational attainment (4) Availability of hospital resources (5) History of psychological problems (6) Number of infected colleagues 	The hospital's lack of human and physical resources and the number of colleagues infected with COVID-19 were the strongest predictors of stress, anxiety, and depression among nurses.	3
Egypt	Gab Allah, A.R. (2021).	To explore challenges facing nurse managers during pandemic and its relation to perceived organizational support.	Descriptive correlational design was utilized. The study was conducted at different health care settings across Egypt. N= 214 (nurse managers) Questionnaire of challenges faced by nurse managers and survey of perceived organizational support. Mann-Whitney test, Kruskal-Wallis test, Spearman's correlation, and regression analysis were utilized.	There was a highly statistically significant negative correlation between challenges currently faced by managers and their perception of organizational support.	Higher perception of organizational support minimizes managers' perception of being challenged in times of pandemics. Implications for Nursing Management Better training focused on disaster management, ethical decision making, leading in times of uncertainty, and maintaining well-being will help nurse managers lead better their teams.	3
Ethiopia	Mekonen, E.G. et al. (2020).	This study aimed to assess the prevalence and associated factors of anxiety, depression, and stress among nurses working in northwest Amhara referral hospitals.	Institution-based cross-sectional study from 9/25/2020 - 10/20/2020 N= 302 nurses thru random sampling technique. A structured pretested self-administered questionnaire was used to collect data. The data were entered into EpiData version 3 and analyzed using SPSS version 21. A binary logistic regression model was used to compute bivariable and multivariable analyses	<p>Risk Factors of Anxiety:</p> <ol style="list-style-type: none"> (1) Unavailability of guideline (2) Fear of infecting a family member (3) Nurses with comorbidities <p>Risk Factors developing STRESS:</p> <ol style="list-style-type: none"> (1) Working at night (2) Lack of training (3) Fear of inflicting virus to their families (4) Negative feedback from family members (5) Presence of confirmed cases within the family (6) Nurses with comorbidities 	Government COVID-19 Calls: <ol style="list-style-type: none"> (1) Community awareness (2) Implement national programs for occupational health and safety (3) Prevent violence in the workplace (4) Improve psychological well-being (5) Protect from physical and biological hazards 	3

Table 1 Continued...						
India	Rayapureddy, D.S. et al. (2020).	To assess the prevalence and predictors of stress, depressive, and anxiety symptoms in nurses worked in Covid care center.	Cross-sectional study. Conducted using the DASS21 scale.	The study revealed that anxiety, depression and stress were the major psychological symptoms observed in nurses while working in Covid care center.	The prevalence of stress, depressive, and anxiety symptoms among HCPs in India during the pandemic is comparable with other countries.	3
Indonesia	Basit, M. & Peni, M.R. (2021).	To illustrates the phenomenon of psychological stress amongst nurses working during the pandemic.	Quantitative descriptive research approach. N= 157 nurses working in all health care facilities from various regions in Indonesia, selected using convenience sampling.	The results showed that nurses are high risk of stress. The study concludes by suggesting the government and health care providers pay greater attention to the early detection and reduction of stress, providing sports facilities, increasing the number of nurses, regular meetings to reflect on the problems faced and psychological consulting facilities of nurses.	Focus on Govt's way to boost nurses mental health via training.	3
Israel	Sperling, D. (2020).	To examined how Israeli nurses respond to ethical dilemmas and tension during the COVID-19 outbreak, and to what extent this is associated with their perceived risk and motivation to provide care to their patients.	Descriptive correlative study using a 53-section online questionnaire, including 4 open-ended questions. N= 231 registered and intern nurses	Perceptions of Respondents (1) Nurses has higher risk levels for contracting the virus. (a) Scared to take care covid patients (b) No right to refuse covid patients (2) Every patient has the right to receive optimal level of care.	Ideal Practices of Covid-19 Nurses (1) Strong commitment to care despite their stress, perceived risk, and feelings of insufficient support and protection at work. (2) Acknowledging value of every patient regardless of optimal outcomes. (3) Seek supportive climate for their needs and ethical concerns.	3
Mexico	Cortés-Álvarez, N.Y., & Vuelvas-Olmos, C.R. (2020).	The present study examined the psychological effects and identify factors associated with worse outcomes, during the coronavirus disease 2019 (COVID-19) outbreak in Mexican nurses involved in fighting against COVID-19.	An anonymous online questionnaire was applied through an online survey, which collected information regarding basic information, traumatic distress response (IES-R scale), emotional exhaustion (MBI-EE), and psychological distress (K10 scale).	Results showed moderate-severe traumatic distress response (46.72%), high level of emotional exhaustion (42.40%), and moderate-severe psychological distress (41.78%). Worst Outcomes: (1) With more than 2 children (2) Increase in working hours (3) Increase in tobacco and alcohol consumption (4) Presence of a confirmed and suspected case in workplace	Large portion of nurses in Mexico is suffering from psychological disturbances related to pandemic.	3
Nepal	Neupane, M.S. et al. (2020).	To assess the stress and anxiety regarding COVID-19 among nurses working at Chitwan medical college and teaching hospital.	Descriptive cross-sectional survey N= 181 Nurses Data was collected using structured questionnaire. Data analysis was performed in SPSS version 20 for window using descriptive statistics.	The findings of the study revealed that out of 181 nurses 54.7% nurses reported moderate and 37.6% reported high level of stress and 10.5% of nurses reported mild to moderate level of anxiety.	Improving nurse's mental health through training programs.	3

Table 1 Continued...						
Not mentioned	Valenti, G.D. et al. (2021).	To evaluate the direct association between EI and occupational stress and its indirect relationship mediated by three sources of social support.	Emotional intelligence (EI) and social support are among the most investigated hypothesized variables that affect stress at work.	Mediation Analysis was used to test hypothesized relationships. Online Questionnaire. N= 367	Emotional Intelligence = DIRECT EFFECT = Psychological Aspect Emotional Intelligence = INDIRECT EFFECT = Occupational Stress	3
Philippines	Labrague, L.J., & De los Santos, J.A. (2020).	This study examines the relative influence of personal resilience, social support and organisational support in reducing COVID-19 anxiety in frontline nurses.	Cross-sectional study using four standardised scales. N= 325 registered nurses	123 out of 325 (37.8%) nurses were found to have dysfunctional levels of anxiety. COVID Anxiety related to: (1) Social support, (2) Personal resilience (3) Organisational support predicted COVID-19 anxiety. Nurse characteristics were not associated with COVID-19 anxiety.	Resilient nurses = Lower Anxiety Organisational interventions: (1) Social support (2) Organisational support (3) Psychological and Mental support services	3
South Korea	Kim, Y. et al. (2020).	This study investigated how social support influences the job engagement/retention intention of nurses struggling in the continuing scenes of the COVID-19 pandemic.	N= 377 nurses	*Suggest that social support should be provided strategically to ensure nurses' job retention.	Increase social support = Nursing job retention	3
South Korea	Chang, H.E., & Cho, S. (2021).	To examine the relationships among nurses' emotional demands, social support, and health.	Cross-sectional survey was conducted at two tertiary hospitals in South Korea. N= 117 nurses from eight units participated. Between-group differences in the main variables were analyzed using the t-test or Mann-Whitney test, and analysis of variance or the Kruskal-Wallis test. Nurses were classified into eight groups according to emotional demands and type of social support, and the effects of social support were analyzed based on mean scores.	Social support = Better health (STAFF NURSE) Social support = Burnout, Stress and Sleep deprivation (NURSE MANAGERS)	Enhancing social support from nursing colleagues is a powerful way to manage the negative effects of nurses' emotional demands.	3
Spain	Allande-Cussó, R. et al. (2021).	To assess the level of work engagement of Spanish nurses during the COVID-19 pandemic.	Cross-sectional study with the 9-item Utrecht Work Engagement Scale (UWES) questionnaire, through an online questionnaire and non-probabilistic snowball sampling.	The results showed a mean age of 45.9 years (SD = 10.7 years), most of them women (78.1%), and 58.5% were in primary care. The mean score for the UWES-9 questionnaire was 4.6 points (SD = 1.35). The categorical regression analysis performed revealed an R2 value of 0.75 and a significance of p < 0.01 in the sex, type of unit, and training variables.	Spanish nurses = high levels of work engagement working in hospital and critical units.	3

<i>Table 1 Continued...</i>						
China	Cui, S. et al. (2020).	To explore experiences and psychological adjustments of nurses who voluntarily traveled to Hubei Province in China to provide support during the COVID-19 epidemic.	Conducted semi-structured, face-to-face interviews with twelve nurses recruited from three hospitals in Jiangsu Province and performed qualitative content analysis of the interview data.	The following themes emerged from the analysis: (1) motivation -- professional commitment/family support/ media propaganda (2) Challenges -- heavy workloads/changes in working patterns/communication barriers/barriers r/t PPE (3) Psychological experiences -- uncertainty/fear of infection/loneliness/stressful events/sleep disorders (4) Psychological adjustments -- adequate training and PPE/positive responses to stress/social support (5) Personal and Professional growth	Ensuring adequate workforce preparedness for nurses, strengthening protection training, and encouraging nurses to apply self-regulation methods, such as exercising and listening to music, and seeking social support to promote mental health.	5
